

**SECOND QUARTER 1998
QUARTERLY MONITORING REPORT**

L.E.CARPENTER

September 1998





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Section 1

Introduction

L.E. Carpenter and Company (L.E. Carpenter) is pleased to submit this Quarterly Monitoring Report for the L.E. Carpenter site located at 170 North Main Street, Wharton, New Jersey (Figure 1). Quarterly monitoring events are performed at the site to comply with paragraph 35 of the 1986 Administrative Consent Order issued by the New Jersey Department of Environmental Protection (NJDEP) to L.E. Carpenter. This report provides a summary of activities completed during the Second Quarter of 1998, to include routine quarterly groundwater monitoring activities.

During the Second Quarter 1998, RMT conducted the following:

- Continued active free product recovery using enhanced fluid recovery (EFR) in accordance with the NJDEP approval letter dated August 20, 1997.
- Conducted quarterly groundwater monitoring activities as required under the Administrative Consent Order.
- Conducted surface water sampling of the drainage ditch in accordance with the NJDEP letter dated January 28, 1998 (See Appendix A).

A discussion of these activities is provided in the following sections.



Section 2

EFR Activities

In August 1997, the NJDEP approved the Remedial Action Plan (RAP) which described free product removal using enhanced fluid recovery (EFR) for the eastern portion of the site. EFR is conducted by applying a vacuum to product recovery wells to remove standing free product, contaminated groundwater, contaminant vapors within the vadose zone, and to enhance any natural biodegradation that may be occurring in the soil and/or groundwater.

RMT conducted second quarter 1998 events on April 24, 1998, May 29, 1998 and June 30, 1998 (Table 1). Prior to conducting EFR, the product level and thickness were measured in each EFR well. The product measurements were recorded to determine the correct placement of the hose or drop pipe and to track the amount of free product and the total volume of fluids removed during EFR through the second quarter 1998. Appendix B contains charts for each plume region (western, central, eastern) that graphically display the free product thickness fluctuations, and free standing product fluctuations trends. Figure 3 displays the extent of free product on-site for each EFR event.

The amount of free product extracted during each EFR event was estimated by measuring product thickness collected in the vacuum truck while also accounting for an estimated volume of product vapor lost through the vent stack. Product vapor volume estimates were based on air flow measurements and concentration of VOCs being vented. During the second quarter 1998, a total of 1,354 gallons of fluid was removed during EFR activities, of which, approximately 310 gallons was free product. Since start-up in December 1997, the EFR system has removed approximately 1,515 gallons of free product through June 30, 1998.

The following paragraphs describe free standing product trends in the western, central, and eastern portions of the free product plume. Free standing product refers to a volume (gal) of product occupying the casings of each EFR well. Total free standing product represents the sum of product volumes from each of the segregated region EFR wells.

In the western portion of the plume (EFR wells 1, 2, 3, 17, 18, 20, 21, and 28), there was a downward trend in free standing product during the second quarter 1998. The total free standing product decreased from 8.38 gallons on April 24, 1998 to 7.03 gallons on June 30, 1998. EFR wells 1, 3, and 20 showed increasing free product thickness during the second quarter 1998, while EFR wells 2, 21, and 28 showed decreasing free product thickness. EFR wells 17 and 18 remained relatively unchanged during the second quarter 1998.

In the central portion of the plume (EFR wells 4, 5, 6, 7, 19, 22, 23, 24, 25, 26, and 27), there was also a downward trend in free standing product during the second quarter 1998. The total free standing product decreased from 6.29 gallons on April 24, 1998 to 4.43 gallons on June 30, 1998. EFR wells 5, 6, 19, 22, and 26 showed decreasing free product thickness as during the second quarter 1998, while EFR wells 4, 7, 23, 24, 25, and 27 remained relatively unchanged. EFR wells 4, 7, 23, 24, and 27 have free product levels either below detection limits or slightly above.

In the eastern portion of the plume (EFR wells 8, 9, 10, 11, 12, 13, 14, 15, and 16), there was no clear trend in the total free standing product in the second quarter 1998. The total free standing product decreased from 8.56 gallons on April 24, 1998 to 7.26 gallons on May 29, 1998 and then increased to 8.52 gallons on June 30, 1998. EFR wells 8, 12, 14, 15, 16 showed free product thickness below detection limits or slightly above during the second quarter 1998. EFR well 10 showed decreasing free product thickness during the second quarter 1998, while EFR wells 9, 11, and 13 showed slightly increasing free product thickness.

The total free standing product throughout the site (accounting for all 28 EFR wells) has decreased from 40.30 feet on December 9, 1997 (EFR Event #1) to 31.16 feet on June 30, 1998 (EFR Event #9). These results show that the EFR activities appear to be reducing the amount of free product which exists at the soil-groundwater interface.



Section 3

Quarterly Monitoring

During the second quarter 1998, RMT conducted routine quarterly groundwater monitoring activities at the L.E Carpenter site in accordance with the revised quarterly sampling program initiated during the second quarter 1995.

Groundwater sampling was conducted on June 4, 1998, in accordance with the procedures contained in the NJDEP's "Field Sampling Procedures Manual" dated May 1992. Monitoring wells MW-4, MW-14I, MW-15S, MW-15I, MW-17S, MW-22R, and MW-25R were purged utilizing a peristaltic pump to at least three well volumes prior to sampling. (Please note: Monitoring wells MW-22 and MW-25 were abandoned and replaced by Weston during the week of July 21, 1997 and are referred to as MW-22R and MW-25R in this report.) During the well purge process, indicator parameters were monitored and recorded so that a representative sample of the formation water was collected for analysis (Appendix C). Once the wells were purged, samples were collected using Teflon coated plastic bailers.

A sample duplicate, a field blank and a trip blank were collected to satisfy quality control requirements. The trip blank was prepared by the laboratory and remained with the sample containers until the samples were returned to the laboratory. The duplicate was collected from monitoring well MW-15I. The field blank was collected by pouring distilled water through a Teflon bailer to verify that the field equipment was not adversely impacting the samples and decontamination procedures were adequate. Any sampling equipment used at each well was decontaminated prior to each use using a soap and water wash and distilled water rinse.

The results of the chemical analyses were compared to the NJDEP Class IIA Groundwater Quality Standards (New Jersey standards) and the Discharge Criteria presented in the Record of Decision (ROD) dated April 20, 1994. The presence of benzene and toluene were not detected at concentrations above the method detection limit in any of the groundwater samples. However, monitoring wells MW-4 and MW-22R contained concentrations of contaminants of concern above the New Jersey standards and/or the discharge criteria.

Concentrations of ethylbenzene (2,260 µg/L), total xylenes (11,300 µg/L), and bis-2-ethylhexylphthalate (DEHP) (5,800 µg/L) were detected in the sample collected from monitoring well MW-22R. DEHP (710 µg/L) was also detected in monitoring well MW-4. The concentrations of ethylbenzene, total xylenes, and DEHP were above both site specific clean up objectives outlined in the ROD.

Concentrations of ethylbenzene below the New Jersey groundwater quality standard and the discharge criteria were detected in monitoring wells MW-4 (1.0 µg/L) and MW-14I (0.34 µg/L). Concentrations of total xylenes below the New Jersey standard and the discharge criteria were detected in monitoring wells MW-4 (1.4 µg/L) , MW-14I (2.0 µg/L) , MW-15S (1.3 µg/L) , and MW-17S (1.2 µg/L). Concentrations of DEHP below the New Jersey standard and the discharge criteria were detected in monitoring wells MW-14I (24 µg/L) , MW-15I (1.9 µg/L) , MW-17S (6.1 µg/L) , and MW-25R (5.3 µg/L).

The groundwater analytical results are presented in Table 2 with analytical laboratory reports presented as Appendix D. Sampling activities and all laboratory analyses were performed by Envirotech Research, Inc. (ERI) of Edison, New Jersey.



Section 4

Watertable Elevations

On June 4, 1998, ERI measured static groundwater levels from 71 different locations throughout the site (see Table 3) to evaluate the groundwater flow pattern in the shallow aquifer. It should be noted that six of the 71 locations monitored were observed to contain a measurable amount of free product. These locations include well points WP-A1 (1.55 feet), WP-A4 (2.80 feet), WP-A6 (3.35 feet), WP-A7 (0.80 feet), WP-A8 (0.01 feet), and WP-A9 (0.40 feet). Corrected water levels were used in the compilation of the groundwater contour map using a specific gravity of the primary constituent (toluene: 0.87). Figure 4 displays the watertable potentiometric surface and indicates that groundwater flow direction is similar to that observed previously (generally toward the northeast).

Groundwater levels from the MW-19/Hot Spot-1 area were also used to determine flow patterns on the western portion of the site. It appears that a groundwater mound is present in the vicinity of monitoring well MW-20. This mound is probably related to the fact that groundwater within the relatively lower permeable clay, observed at monitoring well MW-20, will respond more slowly to fluctuations in the water table, than groundwater within the more permeable materials located beneath most of the western portion of the site.

RMT was unable to determine the specific interaction of the Rockaway River, the ditch located on the Air Products property to the north, and the Washington Forge Pond with shallow groundwater because the staff gauges were missing. The staff gauges will be replaced and surveyed during the fourth quarter, 1998.



Section 5

Ditch Surface Water Sampling

The drainage channel located on the Air Products, Inc. Property, northeast of the L.E. Carpenter site, was the subject of a surface water investigation conducted by RMT on May 29, 1998, pursuant to a request made by the NJDEP in a letter dated January 20, 1998. The sampling was conducted to determine if the ditch was being impacted by DEHP and VOC impacted groundwater.

The surface water investigation consisted of collecting three surface water samples (SW-7-1, SW-5-1, SW-8-1) from three horizontal locations in the ditch, See Figure 2. The three samples were sent to Envirotech Research, Inc. located in Edison, New Jersey to be analyzed by EPA Methods 624 (Volatile Organics) and 625 (Semi-Volatile Organics).

The results of the surface water sampling were summarized and forwarded to Ms. Gwen Zerva of the NJDEP on July 28, 1998. The analytical results revealed no samples having concentrations of contaminants above the Discharge Criteria presented in the Record of Decision (ROD) dated April 20, 1994. A complete copy of the analytical results can be found in Appendix E.

Table 1
L.E. CARPENTER - Wharton, New Jersey
Free Product Recovery - EFR Wells

EFR Event Date Well No.	Development November 21, 1997 Feet of Product	EFR #1 December 9, 1997 Feet of Product	EFR #2 January 7, 1998 Feet of Product	EFR #3 January 22, 1998 Feet of Product	EFR #4 February 17, 1998 Feet of Product	EFR #5 March 13, 1998 Feet of Product	EFR #6 March 27, 1998 Feet of Product	EFR #7 April 24, 1998 Feet of Product	EFR #8 May 29, 1998 Feet of Product	EFR #9 June 30, 1998 Feet of Product
EFR-1	1.64	1.53	1.94	0.36	2.48	0.93	0.94	1.42	1.55	2.11
EFR-2	1.55	1.50	1.86	0.06	2.20	2.96	2.92	2.65	2.44	1.78
EFR-3	0.85	1.02	1.27	-	1.58	1.19	0.03	0.24	0.19	0.77
EFR-4	1.03	2.27	0.54	0.07	0.30	-	-	-	-	0.03
EFR-5	4.03	3.74	4.25	0.32	3.29	3.39	1.71	2.71	2.02	1.86
EFR-6	0.72	1.00	1.24	-	2.27	1.71	1.17	2.23	1.55	1.56
EFR-7	0.17	0.09	0.16	-	-	-	-	-	-	0.02
EFR-8	0.00	0.00	0.00	-	0.08	-	-	-	-	0.03
EFR-9	0.00	1.10	1.79	1.15	0.16	3.08	0.08	0.07	0.11	0.29
EFR-10	5.20	5.80	6.42	2.34	7.47	7.06	6.05	6.71	5.47	5.68
EFR-11	3.07	4.04	4.28	5.64	4.47	4.32	4.67	5.91	5.73	6.08
EFR-12	0.04	0.03	0.00	-	0.07	-	-	-	0.02	0.28
EFR-13	0.48	0.56	1.33	0.05	1.28	1.07	1.07	0.67	-	0.90
EFR-14	0.10	0.16	0.00	-	-	-	-	-	-	-
EFR-15	0.09	0.12	0.27	-	0.06	-	-	-	-	0.03
EFR-16	0.00	0.00	0.00	-	-	-	-	-	-	-
EFR-17	0.04	0.17	1.56	0.39	0.17	0.08	-	0.09	-	0.02
EFR-18	0.10	0.10	0.09	-	-	-	-	-	-	0.01
EFR-19	0.54	2.80	1.89	0.49	1.95	1.63	1.44	0.88	0.65	0.42
EFR-20	0.40	0.34	0.95	0.47	0.27	-	-	0.04	0.24	0.37
EFR-21	2.36	2.40	2.71	2.74	2.74	4.14	3.97	4.23	3.98	3.29
EFR-22	3.78	4.10	0.05	4.81	3.40	4.69	3.42	1.82	1.22	0.96
EFR-23	0.00	0.06	0.06	-	0.02	-	-	-	-	0.05
EFR-24	0.00	0.00	0.00	-	-	-	-	-	-	-
EFR-25	2.95	3.00	3.55	0.26	4.15	3.11	0.72	0.82	0.79	0.78
EFR-26	2.20	2.05	2.66	0.29	2.30	2.12	1.43	1.32	1.95	1.21
EFR-27	0.15	0.02	2.71	0.02	0.74	-	-	0.03	-	0.02
EFR-28	2.20	2.30	1.78	0.48	2.60	3.20	3.48	4.40	3.16	2.61
MIN (ft)	0.00	0.00	0.00	0.02	0.02	0.08	0.03	0.03	0.02	0.01
MAX (ft)	5.20	5.80	6.42	5.64	7.47	7.06	6.05	6.71	5.73	6.08
Average (ft)	1.20	1.44	1.55	1.17	1.92	2.29	2.21	2.01	1.94	1.25
Total Free Product (ft)	33.69	40.30	43.36	19.94	44.05	44.68	33.10	36.24	31.07	31.16
Total Standing Free Product Volume (gal)	21.60	25.83	27.79	12.78	28.24	28.64	21.22	23.23	19.92	19.97
Estimated Total Free Product Removed (gal)*	315	250	210	80	120	130	100	110	95	105
Total Volume Fluid Removed (gal)	2,350	1,410	376	256	314	300	339	403	390	561
Volume Resulting from Drum Purging (GW purge water) if applicable						338	150	600	70	110
Total Volume Removed from Site (gal) (Invoiced volume)	2,350	1,410	376	256	314	638	489	1,003	460	671
Cumulative Total Free Product Removed (gal)	315	565	775	855	975	1,105	1,205	1,315	1,410	1,515
Disposal Cost**	\$3,976.37	\$2,742.62	\$1,130.50	\$1,130.50	\$1,219.12	\$1,431.87	\$1,541.31	\$2,038.43	\$1,240.75	\$1,247.68
Total Cost per gal***	\$1.69	\$1.95	\$3.01	\$4.42	\$3.88	\$2.24	\$3.15	\$2.03	\$2.70	\$2.01

Notes:

1) Product thickness was determined prior to the EFR event.

2) gal = gallon

3) All EFR Wells are 4 inch in diameter

* Estimated free product (gal) based on Vacuum Truck gauging (interface probe) directly after each EFR Event

** Total invoiced disposal cost for EFR event (product and groundwater) and monitoring well purge water from 1/4ly well development and monitoring activities (if applicable)

*** Total Cost per gallon includes product transportation & disposal, manifest prep, & regulatory admin. fee for combined EFR and GW purge water drum volumes (if applicable)

Table 2

Second Quarter 1998 Groundwater Sampling Results

L.E. Carpenter, Wharton, New Jersey

Monitoring Well	Benzene (ug/L)	Ethylbenzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)	DEHP (ug/L)
MW-4	ND	1.0	ND	1.4	710
MW-14I	ND	0.34	ND	2	24
MW-15S	ND	ND	ND	1.3	ND
MW-15I	ND	ND	ND	ND	1.9
MW-17S	ND	ND	ND	1.2	6.1
MW-22R	ND	2,260	ND	11,300	5,800
MW-25R	ND	ND	ND	ND	5.3
NJDEP GWQS (ug/L)	NA	700	1000	40	30
ROD Discharge Criteria (ug/L)	NA	350	500	20	30

Notes:

- 1) ug/L = micrograms per liter
- 2) NJDEP GWQS = New Jersey Groundwater Quality Standards
- 3) Values in bold are above both the NJDEP GWQS and the ROD Discharge Criteria
- 4) NA = Not Applicable
- 5) DEHP - bis-2-Ethylhexylphthalate

Table 3

Water Level Elevations (2nd. QUARTER 1998)

L.E. Carpenter, Wharton, New Jersey

WELL LOCATION	LATITUDE	LONGITUDE	ELEVATION	OUTER CASING	INNER WELL	MEAS. DATE	PRODUCT DEPTH	WATER DEPTH	PRODUCT ELEVATION	WATER ELEVATION	PRODUCT THICKNESS	CORRECTED WATER LEVEL ELEVATIONS
CW-1	40° 54' 14.2"	74° 34' 34.7"	630.83	634.35	--	Jun-98	--	8.10	--	622.73	--	--
CW-3	40° 54' 13.8"	74° 34' 32.5"	628.63	633.30	--	Jun-98	--	7.54	--	621.09	--	--
DC-P0	--	--	625.75	--	--	--	--	NA	--	--	--	--
DC-P1	--	--	625.24	--	--	Jun-98	--	0.21	--	625.03	--	--
DC-P2	--	--	626.91	--	--	--	--	NA	--	--	--	--
DC-P3	--	--	625.22	--	--	--	--	NA	--	--	--	--
DC-P4	--	--	625.12	--	--	Jun-98	--	0.13	--	624.99	--	--
DC-P5	--	--	625.17	--	--	Jun-98	--	0.28	--	624.89	--	--
GEI-1I	40° 54' 19.3"	74° 34' 35.3"	628.44	630.93	630.78	Jun-98	--	4.27	--	626.51	--	--
GEI-2 I	40° 54' 17.4"	74° 34' 43.1"	635.92	638.35	638.20	Jun-98	--	10.19	--	628.01	--	--
GEI-2 S	40° 54' 17.3"	74° 34' 43.0"	635.46	637.87	637.67	Jun-98	--	10.32	--	627.35	--	--
GEI-3 I	40° 54' 14.8"	74° 34' 43.7"	637.56	639.99	639.85	Jun-98	--	12.21	--	627.64	--	--
M.W.-1R	40° 54' 13.8"	74° 34' 38.8"	635.79	635.78	635.47	Jun-98	--	8.54	--	626.93	--	--
MW-2R	40° 54' 14.4"	74° 34' 33.1"	629.06	632.28	632.14	Jun-98	--	5.92	--	626.22	--	--
M.W.-3	40° 54' 14.0"	74° 34' 32.6"	628.64	632.27	632.56	Jun-98	--	6.15	--	626.41	--	--
M.W.-4	40° 54' 12.4"	74° 34' 34.4"	628.86	632.31	632.50	Jun-98	--	6.03	--	626.47	--	--
MW-6R	40° 54' 13.8"	74° 34' 34.1"	629.82	632.64	632.42	Jun-98	--	6.06	--	626.36	--	--
M.W.-8	40° 54' 12.7"	74° 34' 33.3"	627.99	630.56	628.79	Jun-98	--	2.98	--	625.81	--	--
M.W.-9	40° 54' 12.5"	74° 34' 35.1"	629.21	631.69	630.18	Jun-98	--	3.79	--	626.39	--	--
M.W.-11D (R)	40° 54' 14.2"	74° 34' 34.9"	630.66	633.35	633.09	Jun-98	--	3.93	--	629.16	--	--
M.W.-11I (R)	40° 54' 14.1"	74° 34' 34.9"	630.89	633.67	633.33	Jun-98	--	6.86	--	626.47	--	--
M.W.-11 S	40° 54' 14.0"	74° 34' 34.9"	631.23	633.26	632.96	Jun-98	--	6.53	--	626.43	--	--
MW-12R	40° 54' 12.3"	74° 34' 35.9"	632.17	634.86	634.33	Jun-98	--	7.77	--	626.56	--	--
M.W.12 S	40° 54' 12.3"	74° 34' 36.0"	630.23	633.71	633.18	--	--	--	--	--	--	--
M.W.-13 I	40° 54' 15.1"	74° 34' 31.9"	628.36	630.88	630.66	Jun-98	--	4.42	--	626.24	--	--
MW-13R	40° 54' 15.0"	74° 34' 31.8"	628.26	630.96	630.59	Jun-98	--	4.49	--	626.10	--	--
M.W.-13 S	40° 54' 15.3"	74° 34' 31.7"	628.34	631.40	631.23	Jun-98	--	5.12	--	626.11	--	--
M.W.-14 I	40° 54' 14.2"	74° 34' 31.2"	625.93	628.32	628.23	Jun-98	--	2.30	--	625.93	--	--
M.W.-14 S	40° 54' 14.3"	74° 34' 31.0"	625.78	628.63	628.41	Jun-98	--	2.89	--	625.52	--	--
M.W.-15 I	40° 54' 15.0"	74° 34' 37.9"	634.74	636.88	636.66	Jun-98	--	9.91	--	626.75	--	--
M.W.-15 S	40° 54' 15.0"	74° 34' 38.0"	634.83	637.03	636.77	Jun-98	--	10.03	--	626.74	--	--
M.W.-16 I	40° 54' 16.0"	74° 34' 40.3"	632.43	635.08	634.96	Jun-98	--	7.61	--	627.35	--	--
M.W.-16 S	40° 54' 15.9"	74° 34' 40.4"	632.57	634.69	634.47	Jun-98	--	7.34	--	627.13	--	--
M.W.-17 S	40° 54' 12.8"	74° 34' 39.7"	632.95	634.92	634.79	Jun-98	--	7.75	--	627.04	--	--

Table 3

Water Level Elevations (2nd. QUARTER 1998)

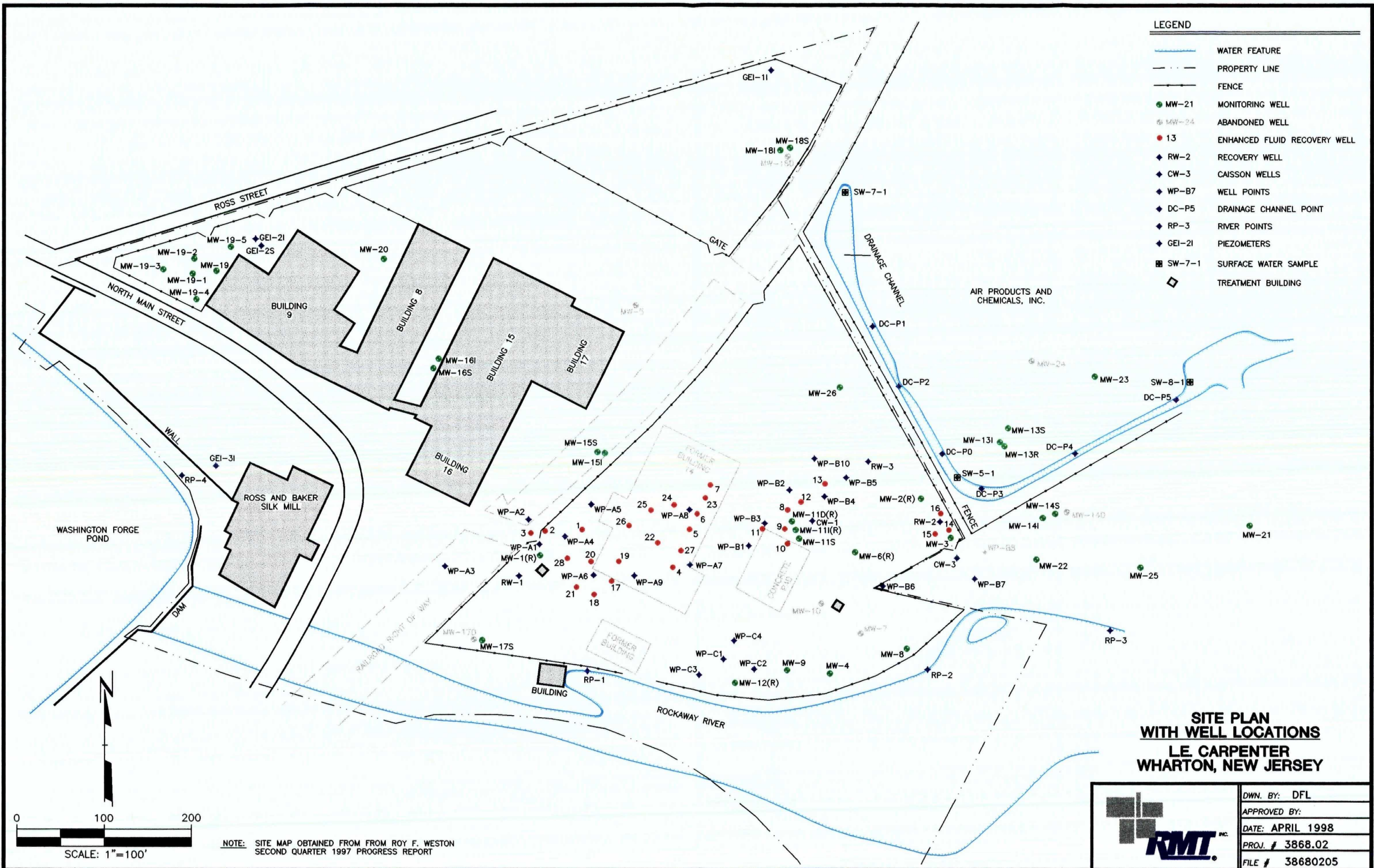
L.E. Carpenter, Wharton, New Jersey

WELL LOCATION	LATITUDE	LONGITUDE	ELEVATION	OUTER CASING	INNER WELL	MEAS DATE	PRODUCT DEPTH	WATER DEPTH	PRODUCT ELEVATION	WATER ELEVATION	PRODUCT THICKNESS	CORRECTED WATER LEVEL ELEVATIONS
M.W.-18 I	40° 54' 18.4"	74° 34' 35.2"	628.35	631.19	631.04	Jun-98	--	4.60	--	626.44	--	--
M.W.-18 S	40° 54' 18.4"	74° 34' 35.0"	628.22	631.48	631.26	Jun-98	--	5.04	--	626.22	--	--
M.W.-19	40° 54' 17.1"	74° 34' 43.7"	636.72	639.24	638.88	Jun-98	--	11.47	--	627.41	--	--
M.W.-19-1	40° 54' 17.0"	74° 34' 44.0"	636.50	639.26	638.86	Jun-98	--	11.40	--	627.46	--	--
M.W.-19-2	40° 54' 17.2"	74° 34' 44.0"	637.05	639.36	638.76	Jun-98	--	11.32	--	627.44	--	--
M.W.-19-3	40° 54' 17.1"	74° 34' 44.5"	637.54	640.04	639.65	Jun-98	--	12.13	--	627.52	--	--
M.W.-19-4	40° 54' 16.7"	74° 34' 44.0"	636.27	638.44	637.74	Jun-98	--	10.16	--	627.58	--	--
M.W.-19-5	40° 54' 17.3"	74° 34' 43.5"	636.39	639.07	638.74	Jun-98	--	11.41	--	627.33	--	--
M.W.-20	40° 54' 17.2"	74° 34' 41.2"	634.82	637.03	636.77	Jun-98	--	8.51	--	628.26	--	--
M.W.-21	40° 54' 14.1"	74° 34' 28.2"	625.17	629.09	628.80	Jun-98	--	3.10	--	625.70	--	--
M.W.-22	40° 54' 13.7"	74° 34' 31.2"	625.94	628.31	628.13	Jun-98	--	2.30	--	625.83	--	--
M.W.-23	40° 54' 15.8"	74° 34' 30.5"	628.70	630.95	630.64	Jun-98	--	3.86	--	626.78	--	--
M.W.-25	40° 54' 13.7"	74° 34' 29.8"	625.25	627.37	627.22	Jun-98	--	1.69	--	625.53	--	--
MW-26	40° 54' 15.7"	74° 34' 34.3"	630.84	634.39	633.26	Jun-98	--	6.93	--	626.33	--	--
RP-1	--	--	629.65	--	--	--	--	NA	--	--	--	--
RP-2	--	--	627.75	--	--	Jun-98	--	1.79	--	625.96	--	--
RP-3	--	--	627.11	--	--	Jun-98	--	2.50	--	624.61	--	--
RP-4	--	--	642.28	--	--	Jun-98	--	2.55	--	639.73	--	--
RW-1	40° 54' 13.6"	74° 34' 39.1"	635.19	637.81	637.38	Jun-98	--	10.54	--	626.84	--	--
RW-2	40° 54' 14.2"	74° 34' 32.8"	629.80	631.78	631.68	Jun-98	--	5.52	--	626.16	--	--
RW-3	40° 54' 14.9"	74° 34' 33.9"	629.89	632.15	631.99	Jun-98	--	5.81	--	626.18	--	--
WP-A1	40° 54' 13.9"	74° 34' 38.8"	636.29	636.32	635.81	Jun-98	8.89	10.44	626.92	625.37	1.55	626.72
WP-A2	40° 54' 14.2"	74° 34' 39.0"	637.31	639.62	639.19	Jun-98	--	DRY	--	--	--	--
WP-A3	40° 54' 13.7"	74° 34' 40.3"	635.97	635.97	635.56	Jun-98	--	8.56	--	627.00	--	--
WP-A4	40° 54' 14.0"	74° 34' 38.5"	635.63	635.66	635.10	Jun-98	9.92	12.72	625.18	622.38	2.80	624.82
WP-A5	40° 54' 14.4"	74° 34' 38.1"	635.70	--	637.85	Jun-98	--	11.15	--	626.70	--	--
WP-A6	40° 54' 13.6"	74° 34' 38.0"	634.95	--	637.28	Jun-98	10.51	13.86	626.77	623.42	3.35	626.33
WP-A7	40° 54' 13.7"	74° 34' 36.6"	632.94	--	634.88	Jun-98	8.41	9.21	626.47	625.67	0.80	626.37
WP-A8	40° 54' 14.3"	74° 34' 36.6"	634.70	--	637.56	Jun-98	10.95	10.96	626.61	626.60	0.01	626.61
WP-A9	40° 54' 13.6"	74° 34' 37.4"	637.22	--	639.32	Jun-98	12.62	13.02	626.70	626.30	0.40	626.65
WP-B1	40° 54' 13.9"	74° 34' 35.7"	631.85	--	633.65	Jun-98	--	6.47	--	627.18	--	--
WP-B2	40° 54' 14.5"	74° 34' 35.1"	630.48	632.58	632.25	Jun-98	--	5.82	--	626.43	--	--
WP-B3	40° 54' 14.2"	74° 34' 35.4"	631.71	--	633.33	Jun-98	--	6.54	--	626.79	--	--
WP-B4	40° 54' 14.5"	74° 34' 34.5"	629.93	--	632.56	Jun-98	--	5.97	--	626.59	--	--

Table 3

Water Level Elevations (2nd. QUARTER 1998)
L.E. Carpenter, Wharton, New Jersey

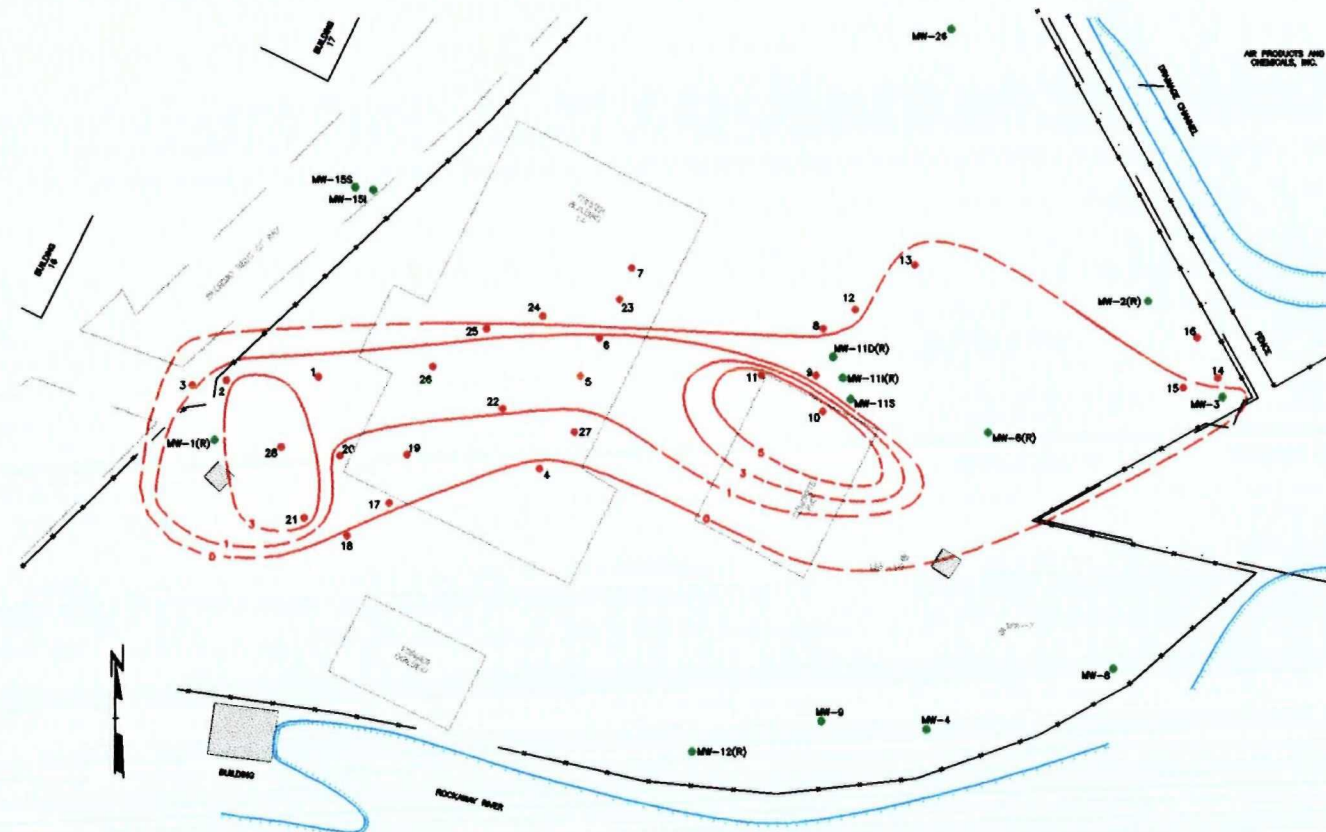
WELL LOCATION	LATITUDE	LONGITUDE	ELEVATION	OUTER CASING	INNER WELL	MEAS DATE	PRODUCT DEPTH	WATER DEPTH	PRODUCT ELEVATION	WATER ELEVATION	PRODUCT THICKNESS	CORRECTED WATER LEVEL ELEVATIONS
WP-B5	40° 54' 14.7"	74° 34' 34.2"	630.03	--	632.11	Jun-98	4.77	4.82	--	627.29	--	--
WP-B6	40° 54' 13.4"	74° 34' 33.7"	629.72	--	631.86	Jun-98	--	6.11	--	625.75	--	--
WP-B7	40° 54' 13.5"	74° 34' 32.3"	627.62	--	629.49	Jun-98	--	3.86	--	625.63	--	--
WP-B9	40° 54' 14.2"	74° 34' 33.5"	640.32	--	632.37	--	--	--	--	--	--	--
WP-B10	40° 54' 14.9"	74° 34' 34.7"	630.42	633.12	632.74	Jun-98	--	6.42	--	626.32	--	--
WP-C1	40° 54' 12.6"	74° 34' 36.1"	632.81	--	633.51	Jun-98	--	6.91	--	626.60	--	--
WP-C2	40° 54' 12.5"	74° 34' 35.6"	633.02	--	634.46	Jun-98	--	7.97	--	626.49	--	--
WP-C3	40° 54' 12.4"	74° 34' 36.4"	631.00	--	632.64	Jun-98	--	6.06	--	626.58	--	--
WP-C4	40° 54' 12.8"	74° 34' 35.9"	632.44	--	633.27	Jun-98	--	6.71	--	626.56	--	--
production well	40° 54' 13.0"	74° 34' 38.6"	634.43	635.41	--	--	--	--	--	--	--	--



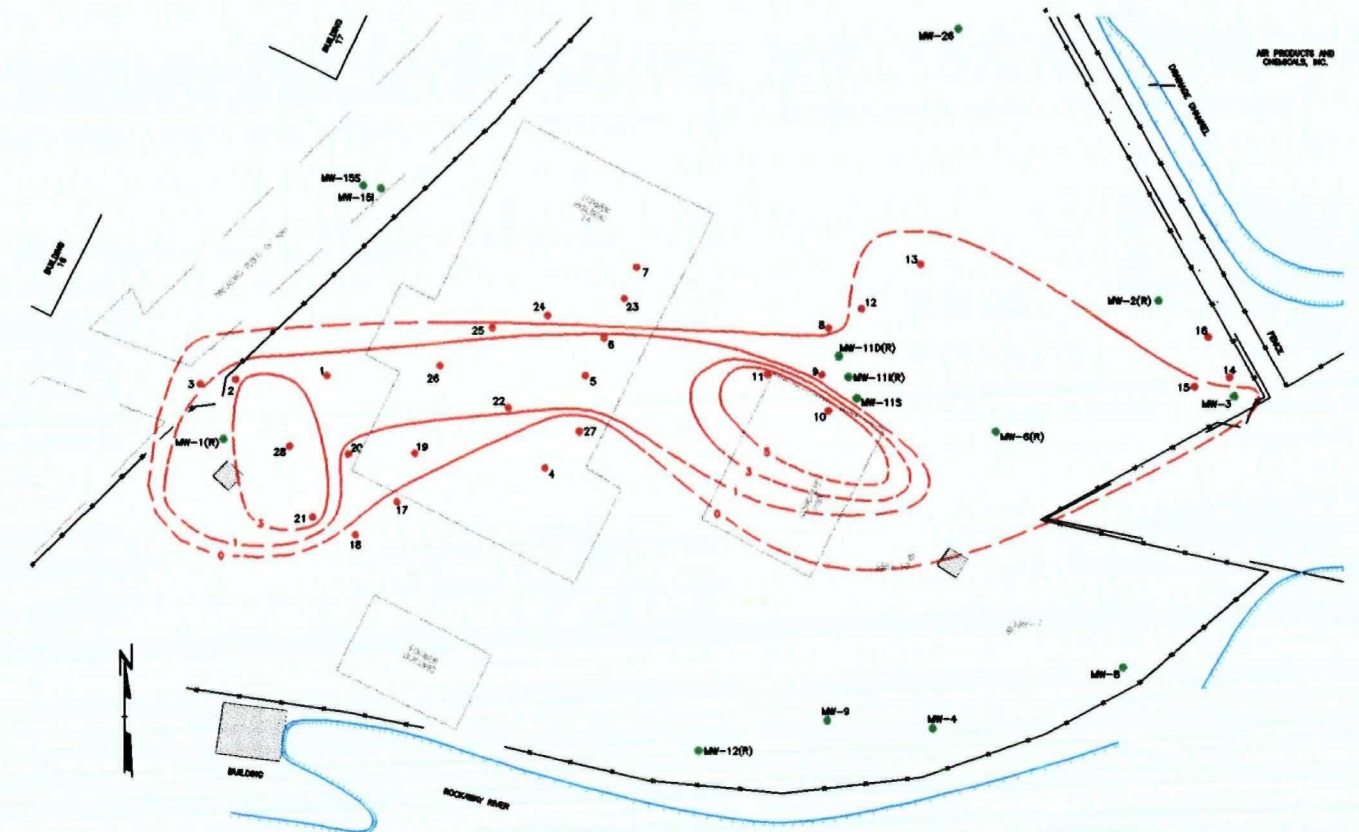
**SITE PLAN
WITH WELL LOCATIONS
LE CARPENTER
WHARTON, NEW JERSEY**

	DWN. BY: DFL
	APPROVED BY:
	DATE: APRIL 1998
	PROJ. # 3868.02
	FILE # 38680205

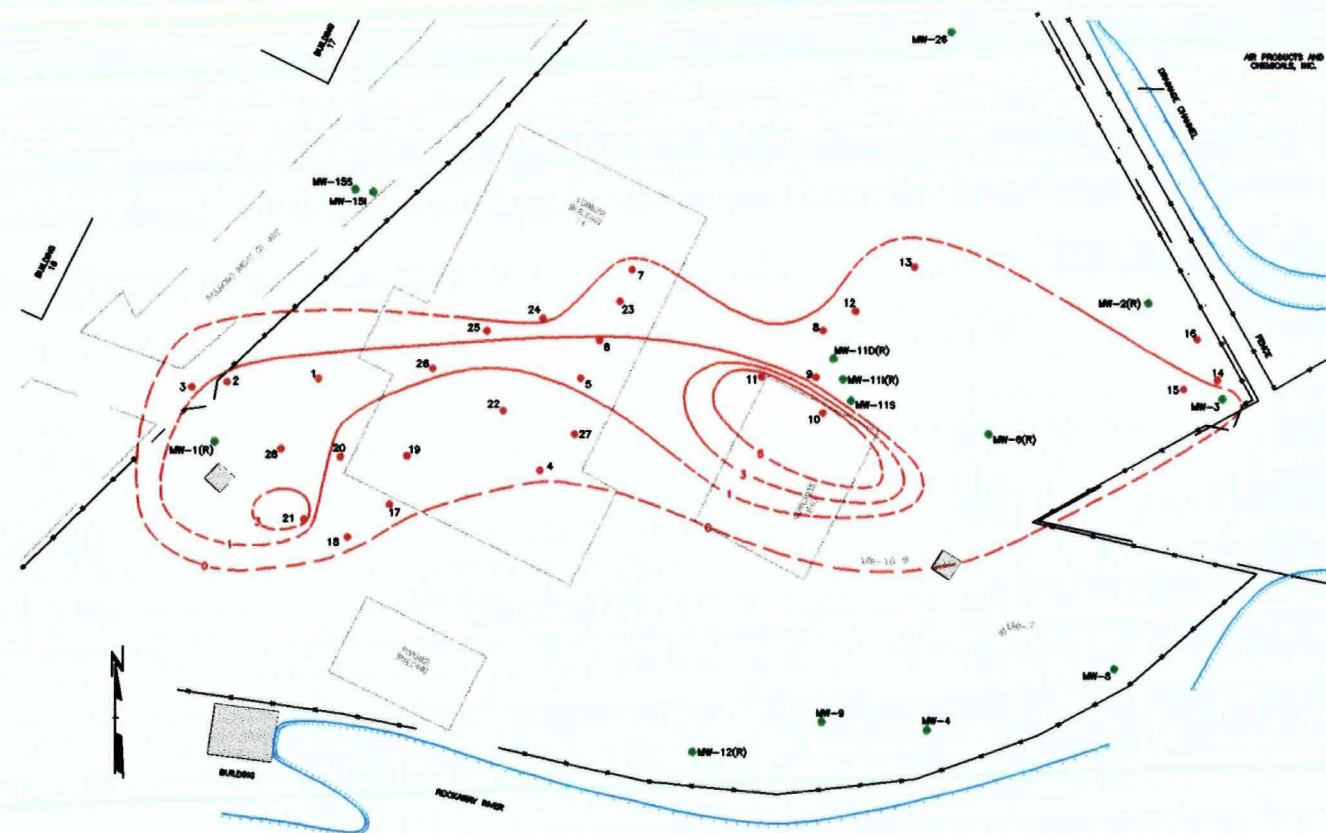
FIGURE 2



EFR EVENT #7 (APRIL 24, 1998)



EFR EVENT #8 (MAY 29, 1998)



EFR EVENT #9 (JUNE 30, 1998)

**ENHANCED FLUID RECOVERY
SUMMARY FIGURES
L.E. CARPENTER
WHARTON, NEW JERSEY**


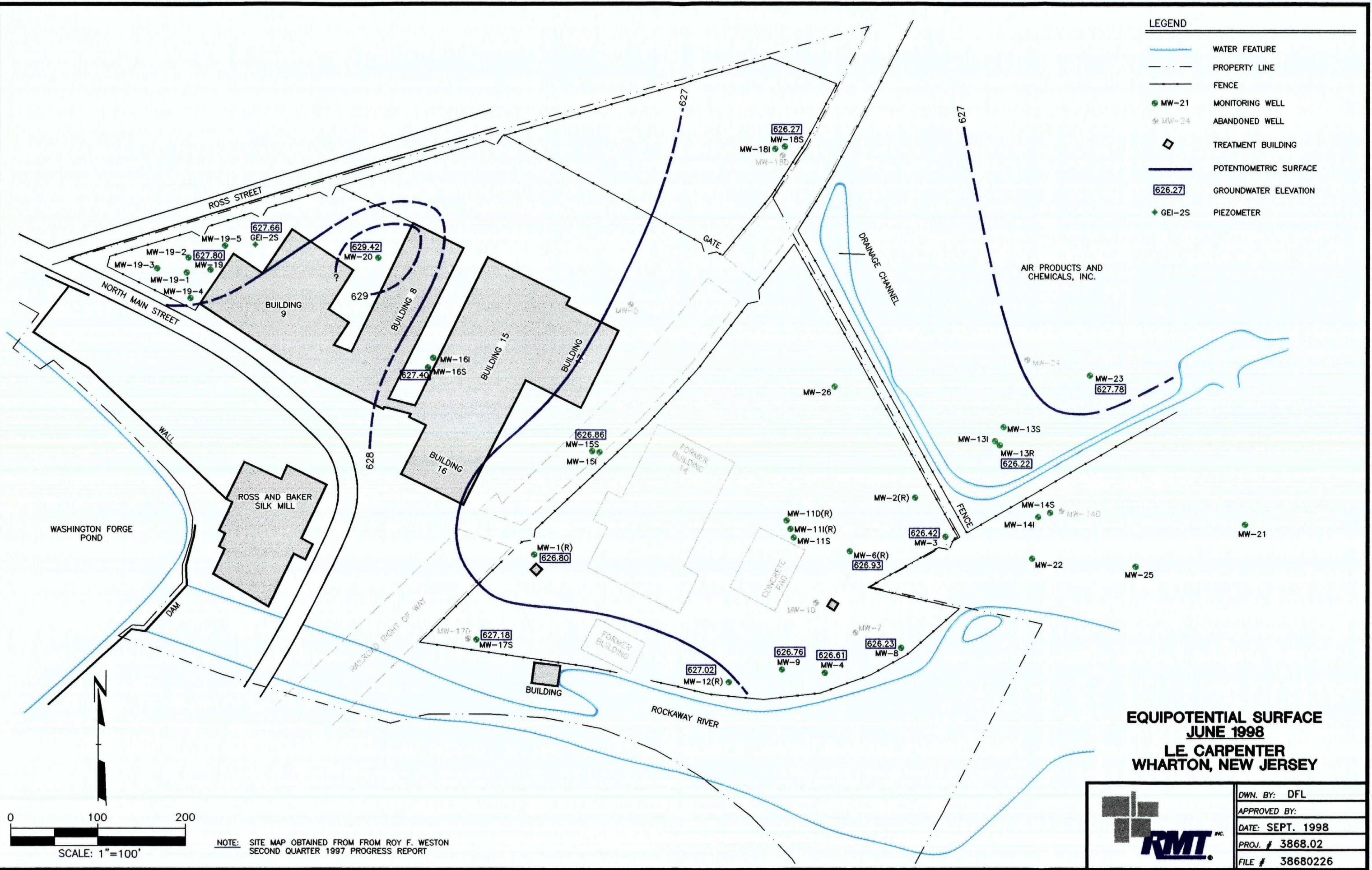
	DWN. BY: DFL
	APPROVED BY:
	DATE: SEPT. 1998
	PROJ. # 3868.07
	FILE # 38680228

FIGURE 3

Dwg Size: x
 Plot Date: x
 Plot Time: x
 Attached Xref's: x
 Drawing Name: x
 Operator Name: x
 Scale: x



Dwg. No.:
Plot Date:
Plot Time:
Attached Xrefs:

Drawing Name:
Operator Name:
Scale:

	DWN. BY: DFL
	APPROVED BY:
	DATE: SEPT. 1998
	PROJ. # 3868.02
	FILE # 38680226



Appendix A
Copy of New Jersey DEP Letter Dated
January 28, 1998



FEB - 2 1998

C.R. AND

State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

Mr. Cristopher Anderson
Director, Environmental Affairs
L.E. Carpenter & Company
200 Public Square
Suite 36-5000
Cleveland, OH 44114-2304

JAN 28 1998

Dear Mr. Anderson:

Re: L.E. Carpenter Superfund Site
Wharton, Morris County

On June 24, 1997 Roy F. Weston, Inc. (Weston) sent a letter to the New Jersey Department of Environmental Protection which proposed replacement, repair, and abandonment of several monitoring wells. Weston began this work prior to obtaining the Department's approval, and subsequently abandoned two monitoring wells (MW-11I and MW-11D) of which the Department did not approve. These wells would be useful to monitor the hydraulic conditions when recharge of treated ground water will occur. When this was told to Weston by telephone, the abandonment had already been completed. However, Weston stated that in the case of MW-11I, the well screen completely penetrated a clay layer, so the ground water samples from this well may not be representative of a specific zone, and in the case of MW-11D, the well screen was not set in a specific aquifer zone. Therefore, these wells were not serving their intended purpose and had to be abandoned.

It has come to the Department's attention that field work to delineate the MW-19 area will begin shortly. Since the well drilling equipment will be at the site, the Department is requesting that L.E. Carpenter install two new wells in the vicinity of where MW-11I and MW-11D were located during this field work event. One well should be screened in the intermediate zone and the other in the deep zone.

In addition, the Department has reviewed the Second Quarter 1997 Progress Report and has the following comments:

1. Section 1.4.1 - It is stated that ground water samples were collected in accordance with the protocols provided in the Department's "Field Sampling Procedures Manual" dated May 1992 and EPA's "Low Flow (Minimal Drawdown) Ground-Water Sampling Procedures" dated December 1995. The document further states the ground water samples were collected with a peristaltic pump upon completion of well purging.


The Department prohibits the use of peristaltic pumps to obtain ground water samples contaminated with volatile organic compounds. The use of this pump will strip off the volatile fraction, resulting in "non-detect"

or significantly reduced contaminant levels leading to erroneous conclusions concerning the extent of ground water contamination. Please refer to pages 173 and 177 of "Field Sampling Procedures Manual" where the use of peristaltic and other suction lift pumps for sampling ground water contaminated with volatile organic compounds is discussed. Accordingly, the Department requires that L.E. Carpenter adhere to the Department's requirements for collecting ground water samples. Should future sampling events not follow the correct procedures, the data will be rejected.

2. The ditch has not been sampled, which was proposed in the Aquifer Testing Protocol. This sampling must occur, since it was approved by the Department, or justification provided otherwise.

Please feel free to contact me at (609) 633-7261 if you have any questions.

Sincerely,



Gwen Barunas, P.E.

Case Manager

Bureau of Federal Case Management

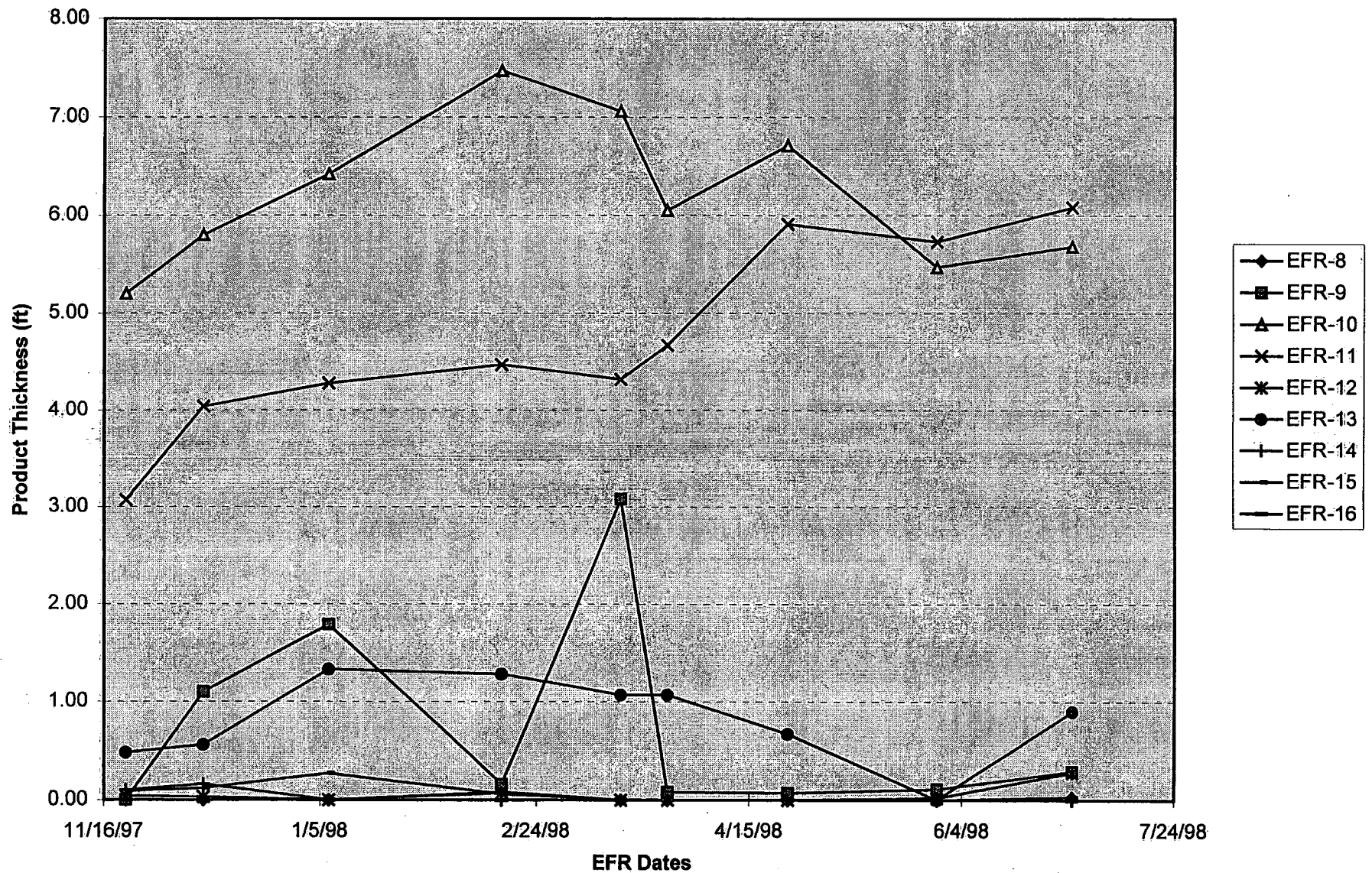
c: Stephen Cipot, USEPA
George Blyskun, BGWPA
John Prendergast, BEERA



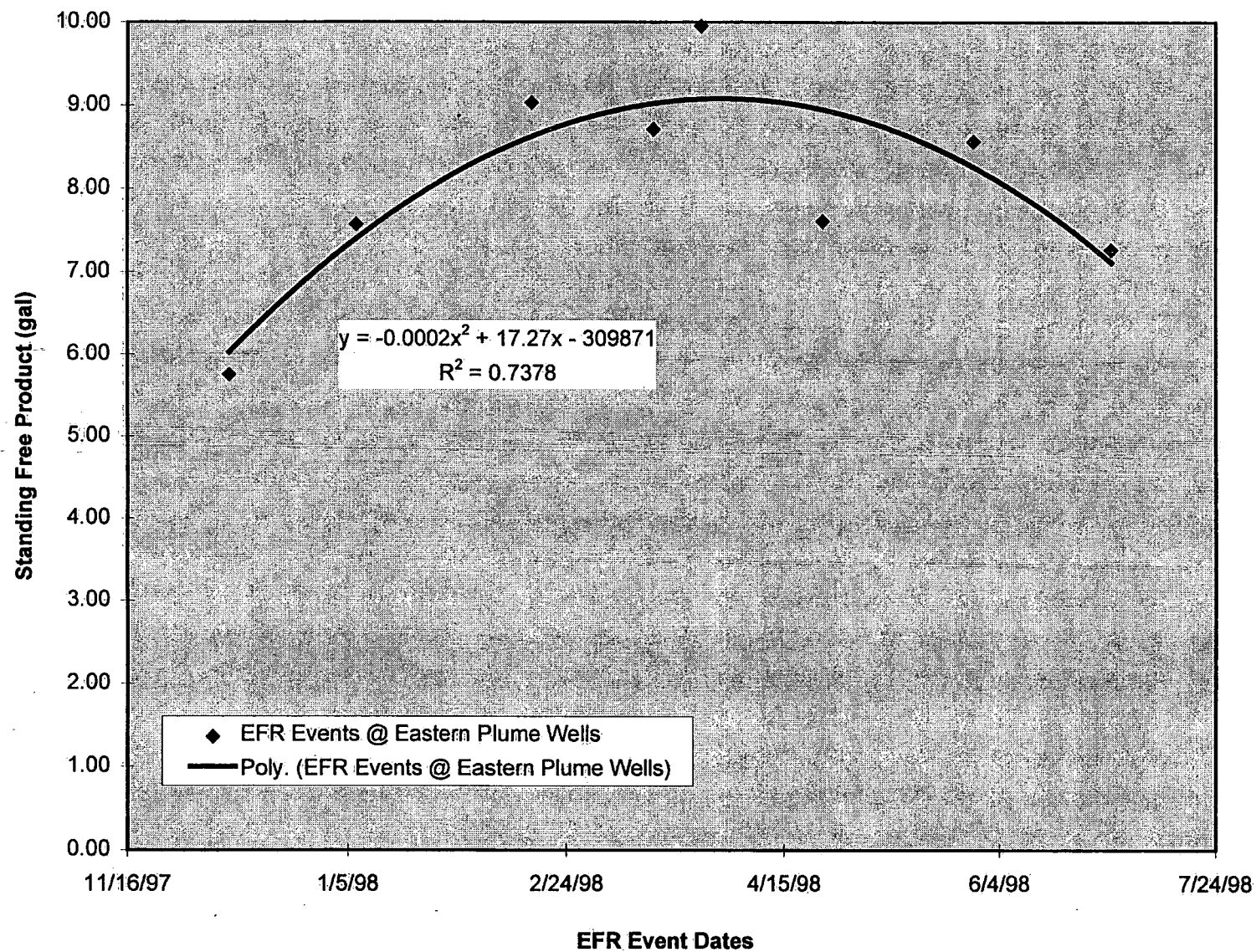
Appendix B

Free Product Fluctuation Charts

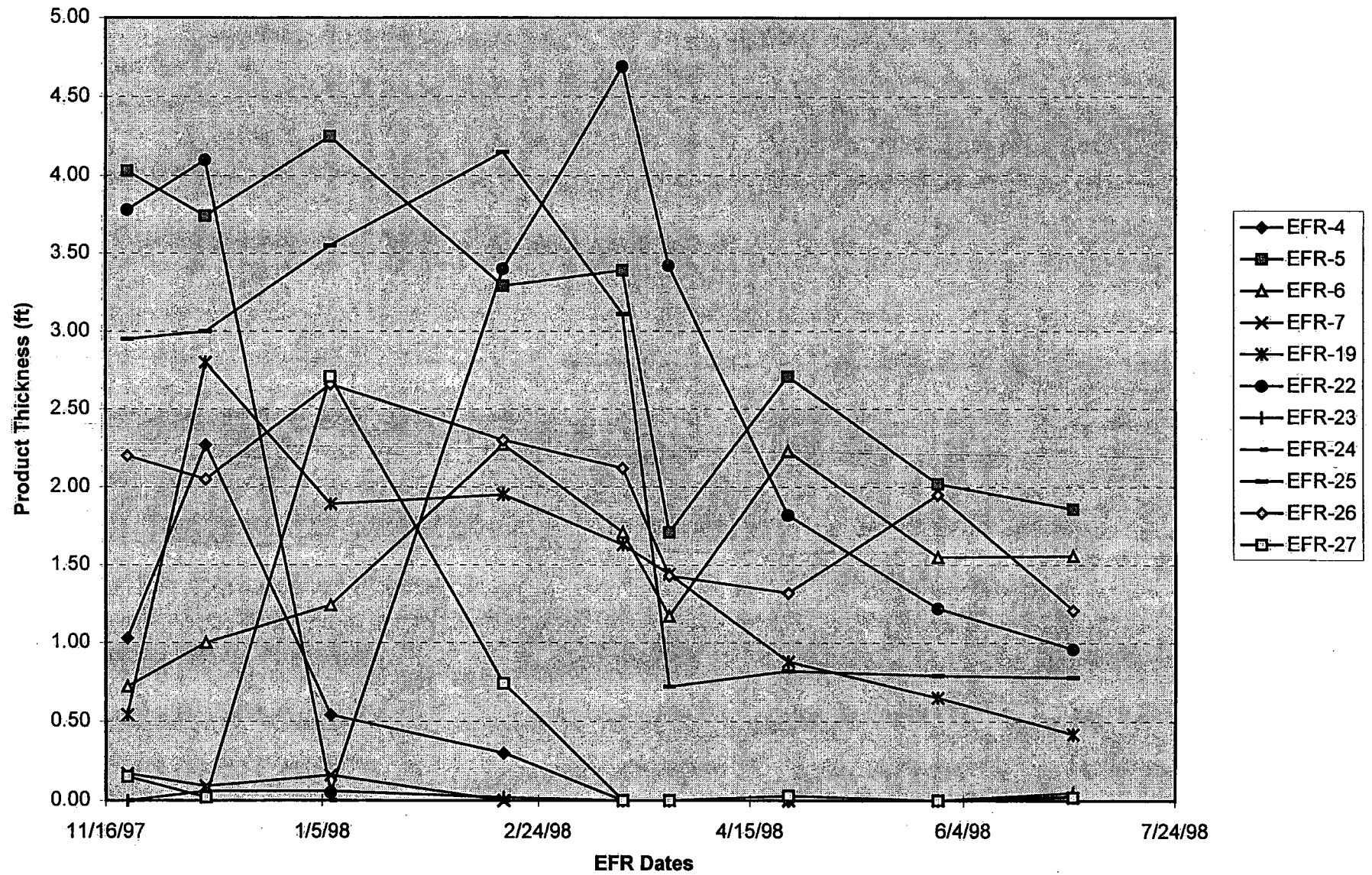
Free Product Changes vs. Time
Eastern Portion of Plume
L.E. Carpenter, Wharton, New Jersey



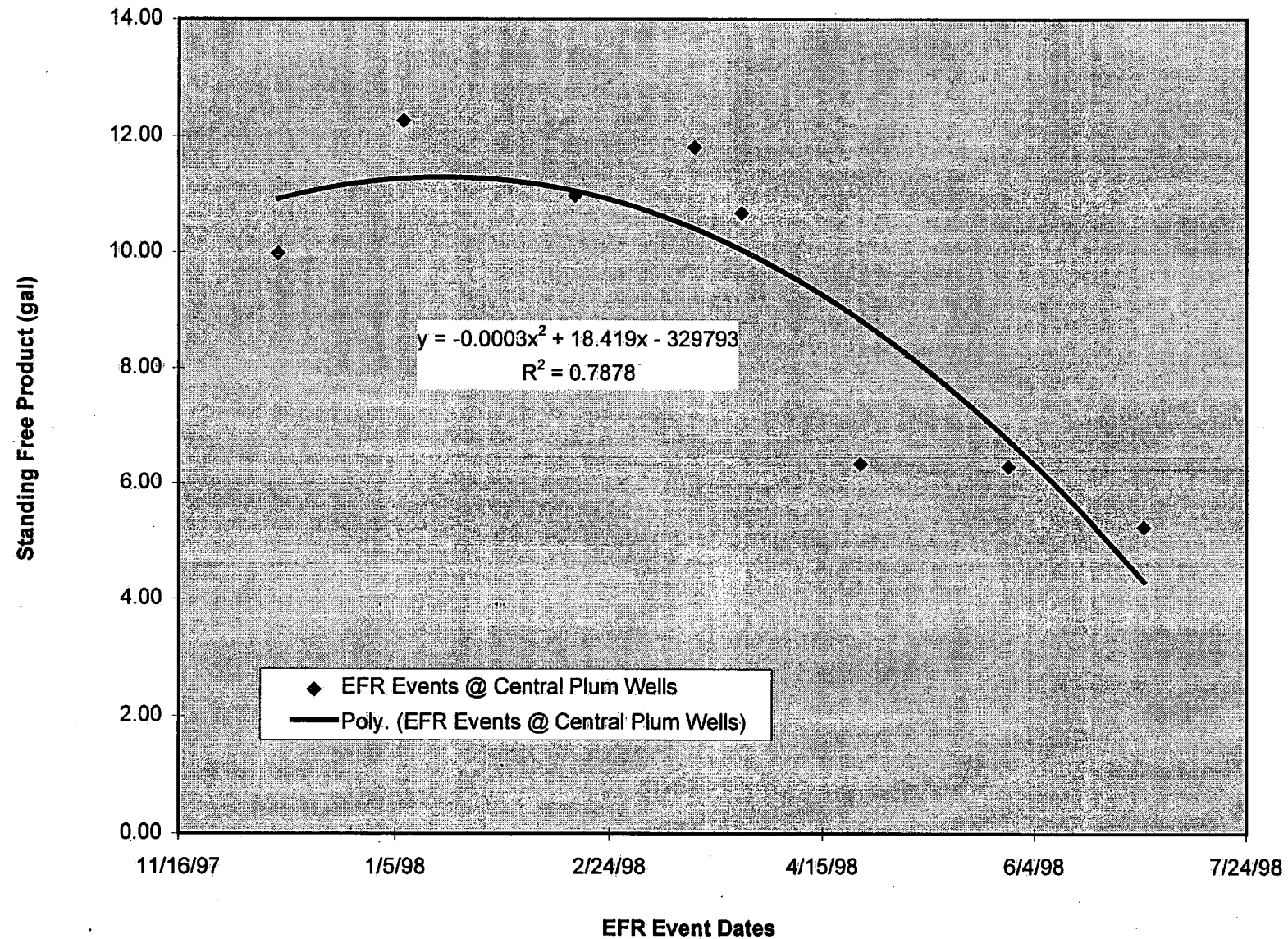
Free Standing Product vs. Time
Eastern Portion of Plume
L.E. Carpenter, Wharton, New Jersey



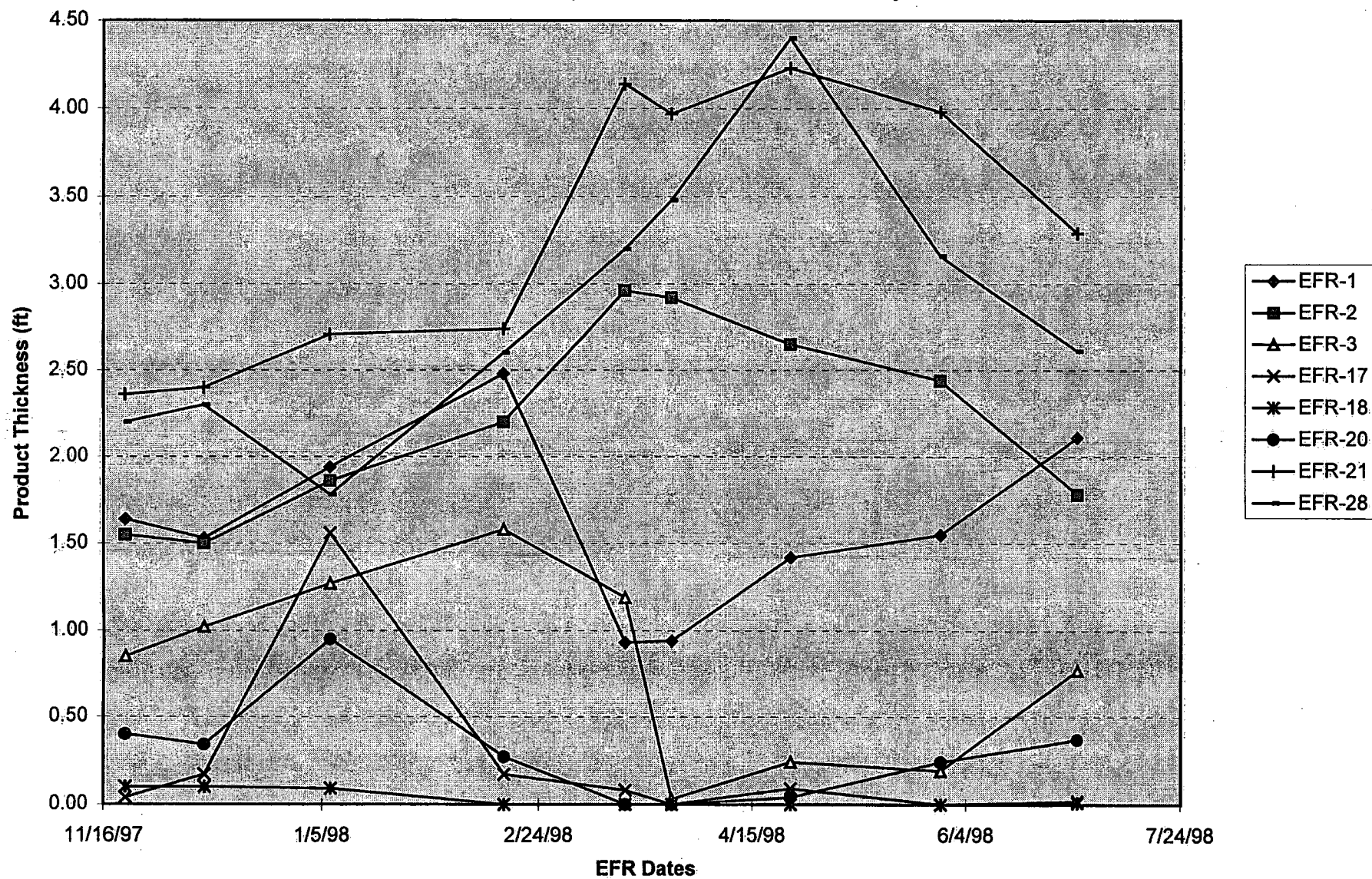
Free Product Changes vs. Time
Central Portion of Plume
L.E. Carpenter, Wharton, New Jersey



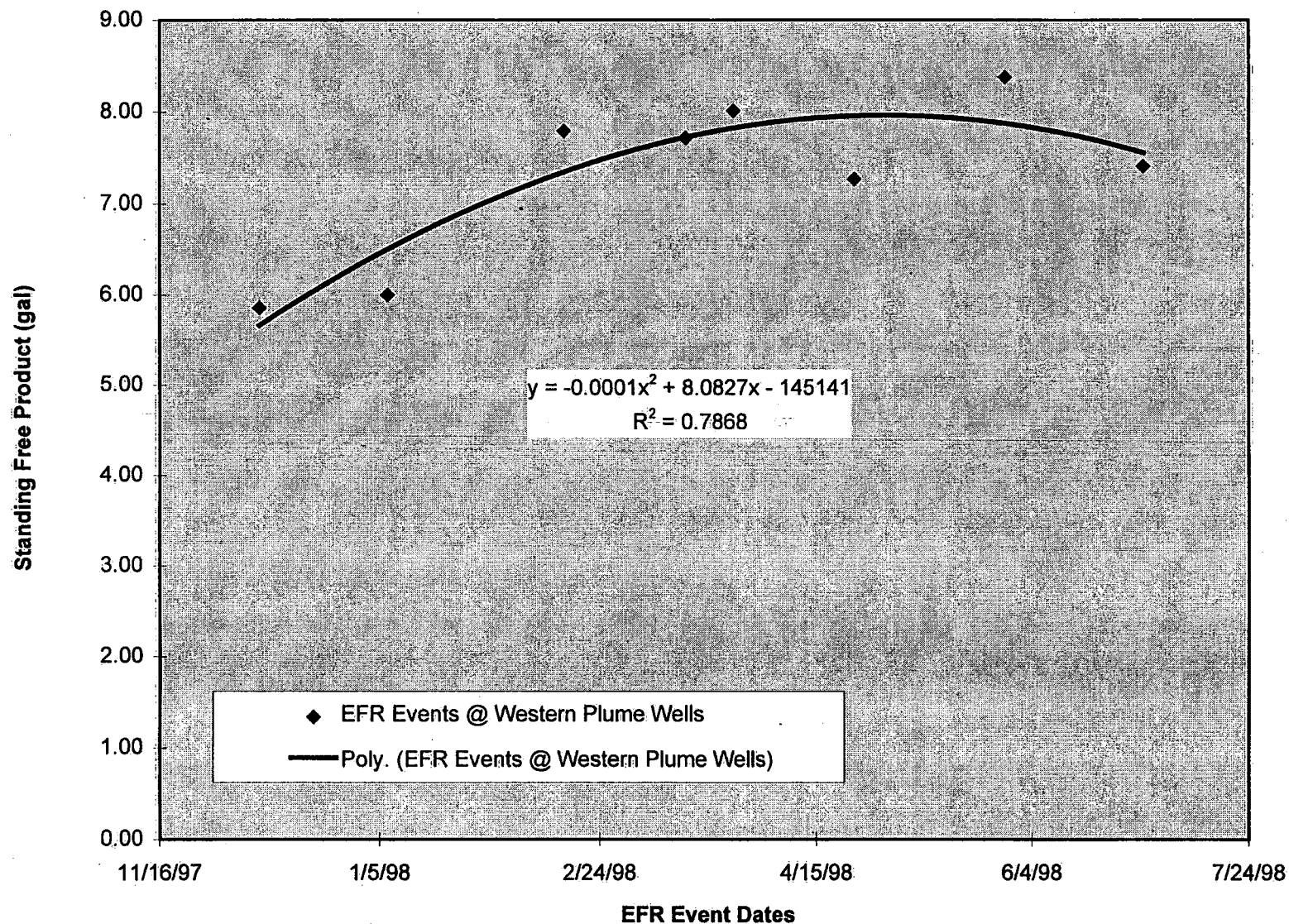
Free Standing Product vs. Time
Central Portion of Plume
L.E. Carpenter, Wharton, New Jersey



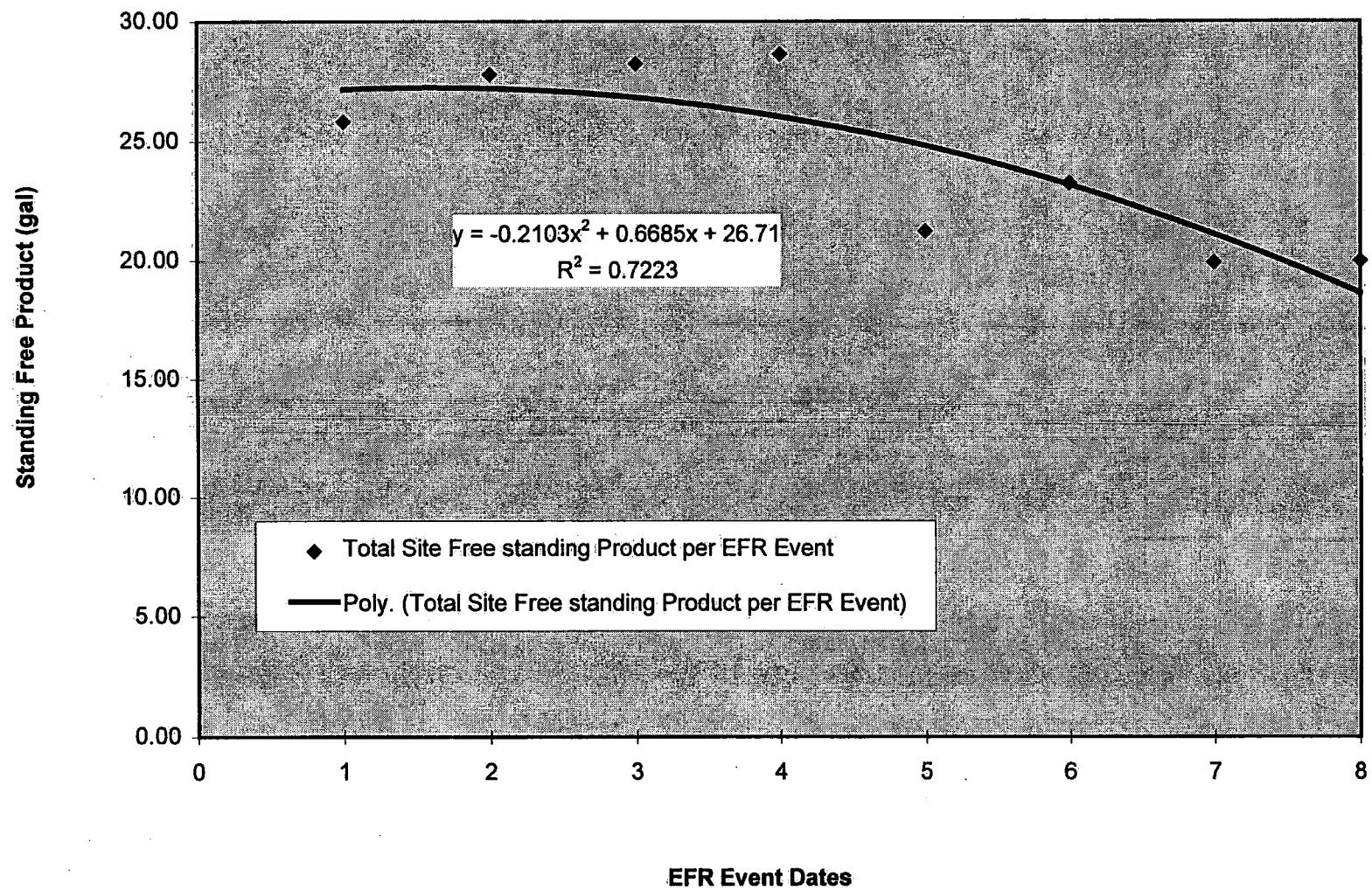
Free Product Changes vs. Time
Western Portion of Plume
L.E. Carpenter, Wharton, New Jersey



Free Standing Product vs. Time
Western Portion of Plume
L.E. Carpenter, Wharton, New Jersey



Total Site Free Standing Free Product vs. Time
L.E. Carpenter, Wharton, New Jersey





Appendix C

Well Sampling Data

Monitoring Well Data

Client: RMTProject: LE CarpenterJob No: E 363Date Sampled: 6/4/98Analyst: M. Morse

Well ID	MW-15S	MW-15I	MW-22R	MW-25R	MW-14I	MW-17S	MW-4
Depth to Water From TOC feet (before purging)	10.03	9.91	2.30	1.69	2.30	7.75	6.03
Depth to Water From TOC feet (after purging)	10.07	10.14	6.95	8.22	2.34	7.91	6.61
Depth to Water From TOC feet (before sampling)	10.04	9.94	2.57	2.02	2.22	7.82	6.07
Depth to Bottom From TOC feet	19.48	40.14	8.81	9.11	43.32	15.00	18.31
PID Reading from Well Casing (ppm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
pH before Purge	7.13	7.74	6.67	6.96	7.61	5.96	6.92
Temp. before Purge (°C)	15.4	15.1	13.1	12.9	13.4	14.5	14.9
Diss. Oxygen before Purge (ppm)	1.3	1.5	0.7	1.2	2.1	1.4	1.2
Cond. before Purge (umhos/cm)	145	200	498	435	210	170	375
Water Volume in Well (gal.)	6.1	5.4	1.2	1.3	7.3	4.7	2.2
Purge Method	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump
Purge Start Time	10:09	10:08	13:19	13:27	13:17	14:14	14:39
Purge End Time	10:29	10:24	13:25	13:33	13:36	14:26	14:50
Purge Rate (gpm)	0.9	1.0	0.6	0.6	1.1	1.1	0.6
Volume Purged (gal.)	19	17	4	4	22	14	7
pH after Purge	7.15	7.27	6.79	6.95	7.81	6.21	6.97
Temp. after Purge (°C)	13.6	14.9	12.5	13.4	13.1	13.9	13.2
Diss. Oxygen after Purge (ppm)	0.9	1.0	0.8	0.8	1.8	0.9	0.9
Cond. after Purge (umhos/cm)	148	320	500	432	217	185	350
pH after Sample	6.97	7.31	6.92	6.97	7.77	6.18	7.06
Temp. after Sample (°C)	13.8	14.8	12.6	14.7	13.4	13.3	13.3
Diss. Oxygen after Sampling (ppm)	2.5	1.3	0.9	1.2	2.1	1.1	1.0
Cond. after Sample (umhos/cm)	150	325	500	430	215	185	360
Sampling Method	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer
Time of Sampling	10:39	10:33	13:42	13:47	13:55	14:30	14:55

Client: RMTProject: LE CarpenterJob No: E 363 Date Sampled: 6/4/1998 Analyst: M. MorseWater Levels/Free Product Measurements

Well ID	Depth to Product	Depth to Water
MW-1 (R)	*NMP	8.54
MW-2 (R)	N/A	5.92
MW-3	NMP	6.15
MW-4	N/A	6.03
MW-6 (R)	NMP	6.06
MW-8	N/A	2.98
MW-9	N/A	3.79
MW-11S	N/A	6.53
MW-111R	N/A	6.86
MW-11DR	N/A	3.93
MW-12R	N/A	7.77
MW-13S	N/A	5.12
MW-13(R)	N/A	4.49
MW-131	N/A	4.42
MW-14S	N/A	2.89
MW-14I	N/A	2.30
MW-15S	N/A	10.03
MW-15I	N/A	9.91
MW-16S	N/A	7.34
MW-16I	N/A	7.61
MW-17S	N/A	7.75
MW-18S	N/A	5.04
MW-18I	N/A	4.60
MW-19	N/A	11.47
MW-20	N/A	8.51
MW-21	N/A	3.10
MW-22 (R)	N/A	2.30
MW-23	N/A	3.86
MW-25 (R)	N/A	1.69
MW-26	N/A	6.93
RW-1	NMP	10.54
RW-2	N/A	5.52
RW-3	N/A	5.81
CW-1	N/A	8.10
CW-3	N/A	7.54
GEI-1I	N/A	4.27
GEI-2S	N/A	10.32
GEI-2I	N/A	10.19
GEI-3I	N/A	12.21
WP-A1	8.89	10.44
WP-A2	N/A	Dry
WP-A3	N/A	8.56

Well ID	Depth to Product	Depth to Water
WP-A4	9.92	12.72
WP-A5	N/A	11.15
WP-A6	10.51	13.86
WP-A7	8.41	9.21
WP-A8	10.95	10.96
WP-A9	12.62	13.02
WP-B1	N/A	6.47
WP-B2	N/A	5.82
WP-B3	N/A	6.54
WP-B4	N/A	5.97
WP-B5	4.77	4.82
WP-B6	N/A	6.11
WP-B7	N/A	3.86
WP-B10	N/A	6.42
WP-C1	N/A	6.91
WP-C2	N/A	7.97
WP-C3	N/A	6.06
WP-C4	N/A	6.71
DC-P0	N/A	Not located
DC-P1	N/A	0.21
DC-P2	N/A	Pushed over
DC-P3	N/A	Not located
DC-P4	N/A	0.13
DC-P5	N/A	0.28
RP-O1	N/A	Not located
RP-O2	N/A	1.79
RP-O3	N/A	2.50
RP-O4	N/A	2.55
EFR-1	13.55	14.14
EFR-2	13.66	14.42
EFR-3	NMP	9.91
EFR-4	N/A	14.92
EFR-5	13.76	14.53
EFR-6	13.15	13.66
EFR-7	N/A	7.92
EFR-8	N/A	9.41
EFR-9	NMP	4.84
EFR-10	10.05	10.06
EFR-11	10.10	11.64
EFR-12	N/A	8.75
EFR-13	NMP	8.38
EFR-14	N/A	4.28

Well ID	Depth to Product	Depth to Water
EFR-15	N/A	5.75
EFR-16	N/A	4.25
EFR-17	N/A	12.64
EFR-18	N/A	10.73
EFR-19	15.51	15.58
EFR-20	N/A	13.05
EFR-21	8.46	8.65
EFR-22	NMP	13.13
EFR-23	N/A	12.54
EFR-24	N/A	11.11
EFR-25	15.31	15.48
EFR-26	16.58	17.25
EFR-27	N/A	15.21
EFR-28	12.92	15.22
MW-19-1	N/A	11.40
MW-19-2	N/A	11.32
MW-19-3	N/A	12.13
MW-19-4	N/A	10.16
MW-19-5	N/A	11.41



Appendix D

Groundwater Analytical Results

ENVIROTECH RESEARCH, INC.

Client ID: MW-15S
Site: L.E. Carpenter

Lab Sample No: 63991
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Extracted: 06/05/98
Date Analyzed: 06/08/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8639.d

Matrix: WATER
Level: LOW
Sample Volume: 960 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

Parameter

bis(2-Ethylhexyl)phthalate

Analytical Result
Units: ug/l

ND

Method Detection
Limit
Units: ug/l

1.1

ENVIROTECH RESEARCH, INC.

Client ID: MW-15S
Site: L.E. Carpenter

Lab Sample No: 63991
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Analyzed: 06/06/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: gpid0721.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID METHOD 602

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
Benzene	ND	0.20
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	1.3	0.50

ENVIROTECH RESEARCH, INC.

Client ID: MW-15I
Site: L.E. Carpenter

Lab Sample No: 63992
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Extracted: 06/05/98
Date Analyzed: 06/08/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8640.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
bis(2-Ethylhexyl)phthalate	1.9	1.1

ENVIROTECH RESEARCH, INC.

Client ID: MW-15I
Site: L.E. Carpenter

Lab Sample No: 63992
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Analyzed: 06/06/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: gpid0722.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID METHOD 602

Analytical Result
Units: ug/l

Method Detection
Limit
Units: ug/l

Parameter

Benzene
Toluene
Ethylbenzene
Xylene (Total)

ND	0.20
ND	0.14
ND	0.14
ND	0.50

ENVIROTECH RESEARCH, INC.

Client ID: MW-22R
Site: L.E. Carpenter

Lab Sample No: 63993
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Extracted: 06/05/98
Date Analyzed: 06/09/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8647.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 25.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
bis(2-Ethylhexyl)phthalate	5800	28

ENVIROTECH RESEARCH, INC.

Client ID: MW-22R
Site: L.E. Carpenter

Lab Sample No: 63993
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Analyzed: 06/13/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: gpid0821.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 200.0

VOLATILE ORGANICS - GC/PID METHOD 602

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
Benzene	ND	40.0
Toluene	ND	28.0
Ethylbenzene	2260	28.0
Xylene (Total)	11300	100

ENVIROTECH RESEARCH, INC.

Client ID: MW-25R
Site: L.E. Carpenter

Lab Sample No: 63994
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Extracted: 06/05/98
Date Analyzed: 06/08/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8641.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
bis(2-Ethylhexyl)phthalate	5.3	1.1

ENVIROTECH RESEARCH, INC.

Client ID: MW-25R
Site: L.E. Carpenter

Lab Sample No: 63994
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Analyzed: 06/06/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: gpid0723.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID METHOD 602

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
Benzene	ND	0.20
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50

ENVIROTECH RESEARCH, INC.

Client ID: MW-14I
Site: L.E. Carpenter

Lab Sample No: 63995
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Extracted: 06/05/98
Date Analyzed: 06/08/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8642.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
bis(2-Ethylhexyl)phthalate	24	1.1

ENVIROTECH RESEARCH, INC.

Client ID: MW-14I
Site: L.E. Carpenter

Lab Sample No: 63995
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Analyzed: 06/06/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: gpid0724.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID METHOD 602

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u>
		<u>Limit</u> <u>Units: ug/l</u>
Benzene	ND	0.20
Toluene	ND	0.14
Ethylbenzene	0.34	0.14
Xylene (Total)	2.0	0.50

ENVIROTECH RESEARCH, INC.

Client ID: MW-17S
Site: L.E. Carpenter

Lab Sample No: 63996
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Extracted: 06/05/98
Date Analyzed: 06/08/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8643.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
bis(2-Ethylhexyl)phthalate	6.1	1.1

ENVIROTECH RESEARCH, INC.

Client ID: MW-17S
Site: L.E. Carpenter

Lab Sample No: 63996
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Analyzed: 06/06/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: gpid0725.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID METHOD 602

Analytical Result
Units: ug/l

Method Detection
Limit
Units: ug/l

Parameter

Benzene
Toluene
Ethylbenzene
Xylene (Total)

ND
ND
ND
1.2

0.20
0.14
0.14
0.50

ENVIROTECH RESEARCH, INC.

Client ID: MW-4
Site: L.E. Carpenter

Lab Sample No: 63997
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Extracted: 06/05/98
Date Analyzed: 06/09/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8662.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 5.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
bis(2-Ethylhexyl)phthalate	710	5.4

ENVIROTECH RESEARCH, INC.

Client ID: MW-4
Site: L.E. Carpenter

Lab Sample No: 63997
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Analyzed: 06/12/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: gpid0798.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID METHOD 602

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
Benzene	ND	0.20
Toluene	ND	0.14
Ethylbenzene	1.0	0.14
Xylene (Total)	1.4	0.50

ENVIROTECH RESEARCH, INC.

Client ID: MW-15ID
Site: L.E. Carpenter

Lab Sample No: 63998
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Extracted: 06/05/98
Date Analyzed: 06/08/98
GC Column: DB-5
Instrument ID: BNAMS3.1
Lab File ID: t8644.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
bis(2-Ethylhexyl)phthalate	3.8	1.1

ENVIROTECH RESEARCH, INC.

Client ID: MW-15ID
Site: L.E. Carpenter

Lab Sample No: 63998
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Analyzed: 06/11/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: gpid0786.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID METHOD 602

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
Benzene	ND	0.20
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50

ENVIROTECH RESEARCH, INC.

Client ID: Field Blank
Site: L.E. Carpenter

Lab Sample No: 63999
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Extracted: 06/05/98
Date Analyzed: 06/08/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8645.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

Parameter

bis(2-Ethylhexyl)phthalate

Analytical Result
Units: ug/l

ND

Method Detection
Limit
Units: ug/l

1.1

ENVIROTECH RESEARCH, INC.

Client ID: Field Blank
Site: L.E. Carpenter

Lab Sample No: 63999
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Analyzed: 06/05/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: gpid0696.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID METHOD 602

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
Benzene	ND	0.20
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50

ENVIROTECH RESEARCH, INC.

Client ID: Trip_Blank
Site: L.E. Carpenter

Lab Sample No: 64000
Lab Job No: E363

Date Sampled: 06/04/98
Date Received: 06/04/98
Date Analyzed: 06/05/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: gpid0697.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID METHOD 602

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
Benzene	ND	0.20
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50



Appendix E

Surface Water Analytical Results

ENVIROTECH RESEARCH, INC.

Client ID: SW-7-1
Site: L.E. Carpenter

Lab Sample No: 62990
Lab Job No: E185

Date Sampled: 05/29/98
Date Received: 05/29/98
Date Analyzed: 06/08/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v1598.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS METHOD 624

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	0.5	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: SW-7-1
Site: L.E. Carpenter

Lab Sample No: 62990
Lab Job No: E185

Date Sampled: 05/29/98
Date Received: 05/29/98
Date Extracted: 06/05/98
Date Analyzed: 06/09/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8656.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
N-Nitrosodimethylamine	ND	0.7
bis(2-Chloroethyl) ether	ND	0.9
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.1
1,2-Dichlorobenzene	ND	1.0
bis(2-chloroisopropyl) ether	ND	0.8
N-Nitroso-di-n-propylamine	ND	0.8
Hexachloroethane	ND	0.8
Nitrobenzene	ND	1.0
Isophorone	ND	0.8
bis(2-Chloroethoxy) methane	ND	1.0
1,2,4-Trichlorobenzene	ND	1.2
Naphthalene	ND	1.0
Hexachlorobutadiene	ND	0.6
Hexachlorocyclopentadiene	ND	0.4
2-Chloronaphthalene	ND	1.0
Dimethylphthalate	ND	0.5
Acenaphthylene	ND	0.7
2,6-Dinitrotoluene	ND	0.4
Acenaphthene	ND	0.6
2,4-Dinitrotoluene	ND	0.6
Diethylphthalate	ND	0.3
4-Chlorophenyl-phenylether	ND	0.6
Fluorene	ND	0.5
N-Nitrosodiphenylamine	ND	0.4
4-Bromophenyl-phenylether	ND	0.4
Hexachlorobenzene	ND	0.5
Phenanthrene	ND	0.3
Anthracene	ND	0.3
Di-n-butylphthalate	ND	0.3
Fluoranthene	ND	0.3
Pyrene	ND	0.2
Benzidine	ND	20
Butylbenzylphthalate	ND	0.6

ENVIROTECH RESEARCH, INC.

Client ID: SW-7-1
Site: L.E. Carpenter

Lab Sample No: 62990
Lab Job No: E185

Date Sampled: 05/29/98
Date Received: 05/29/98
Date Extracted: 06/05/98
Date Analyzed: 06/09/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8656.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u>
		<u>Limit</u> <u>Units: ug/l</u>
3,3'-Dichlorobenzidine	ND	1.7
Benzo(a)anthracene	ND	0.2
Chrysene	ND	0.3
bis(2-Ethylhexyl)phthalate	ND	1.1
Di-n-octylphthalate	ND	0.4
Benzo(b)fluoranthene	ND	0.1
Benzo(k)fluoranthene	ND	0.2
Benzo(a)pyrene	ND	0.1
Indeno(1,2,3-cd)pyrene	ND	0.1
Dibenz(a,h)anthracene	ND	0.2
Benzo(g,h,i)perylene	ND	0.1

ENVIROTECH RESEARCH, INC.

Client ID: SW-5-1
Site: L.E. Carpenter

Lab Sample No: 62991
Lab Job No: E185

Date Sampled: 05/29/98
Date Received: 05/29/98
Date Analyzed: 06/08/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v1599.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS METHOD 624

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	0.4	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: SW-5-1
Site: L.E. Carpenter

Lab Sample No: 62991
Lab Job No: E185

Date Sampled: 05/29/98
Date Received: 05/29/98
Date Extracted: 06/05/98
Date Analyzed: 06/09/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8657.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
N-Nitrosodimethylamine	ND	0.7
bis(2-Chloroethyl) ether	ND	0.9
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.1
1,2-Dichlorobenzene	ND	1.0
bis(2-chloroisopropyl) ether	ND	0.8
N-Nitroso-di-n-propylamine	ND	0.8
Hexachloroethane	ND	0.8
Nitrobenzene	ND	1.0
Isophorone	ND	0.8
bis(2-Chloroethoxy) methane	ND	1.0
1,2,4-Trichlorobenzene	ND	1.2
Naphthalene	ND	1.0
Hexachlorobutadiene	ND	0.6
Hexachlorocyclopentadiene	ND	0.4
2-Chloronaphthalene	ND	1.0
Dimethylphthalate	ND	0.5
Acenaphthylene	ND	0.7
2,6-Dinitrotoluene	ND	0.4
Acenaphthene	ND	0.6
2,4-Dinitrotoluene	ND	0.6
Diethylphthalate	ND	0.3
4-Chlorophenyl-phenylether	ND	0.6
Fluorene	ND	0.5
N-Nitrosodiphenylamine	ND	0.4
4-Bromophenyl-phenylether	ND	0.4
Hexachlorobenzene	ND	0.5
Phenanthrene	ND	0.3
Anthracene	ND	0.3
Di-n-butylphthalate	ND	0.3
Fluoranthene	ND	0.3
Pyrene	ND	0.2
Benzidine	ND	20
Butylbenzylphthalate	ND	0.6

ENVIROTECH RESEARCH, INC.

Client ID: SW-5-1
Site: L.E. Carpenter

Lab Sample No: 62991
Lab Job No: E185

Date Sampled: 05/29/98
Date Received: 05/29/98
Date Extracted: 06/05/98
Date Analyzed: 06/09/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8657.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u>
		<u>Limit</u> <u>Units: ug/l</u>
3,3'-Dichlorobenzidine	ND	1.7
Benzo(a)anthracene	ND	0.2
Chrysene	ND	0.3
bis(2-Ethylhexyl)phthalate	ND	1.1
Di-n-octylphthalate	ND	0.4
Benzo(b)fluoranthene	ND	0.1
Benzo(k)fluoranthene	ND	0.2
Benzo(a)pyrene	ND	0.1
Indeno(1,2,3-cd)pyrene	ND	0.1
Dibenz(a,h)anthracene	ND	0.2
Benzo(g,h,i)perylene	ND	0.1

ENVIROTECH RESEARCH, INC.

Client ID: SW-8-1
Site: L.E. Carpenter

Lab Sample No: 62992
Lab Job No: E185

Date Sampled: 05/29/98
Date Received: 05/29/98
Date Analyzed: 06/08/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v1600.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS METHOD 624

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: SW-8-1
Site: L.E. Carpenter

Lab Sample No: 62992
Lab Job No: E185

Date Sampled: 05/29/98
Date Received: 05/29/98
Date Extracted: 06/05/98
Date Analyzed: 06/09/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8659.d

Matrix: WATER
Level: LOW
Sample Volume: 960 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u> <u>Limit</u> <u>Units: ug/l</u>
N-Nitrosodimethylamine	ND	0.7
bis(2-Chloroethyl) ether	ND	0.9
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.1
1,2-Dichlorobenzene	ND	1.0
bis(2-chloroisopropyl) ether	ND	0.9
N-Nitroso-di-n-propylamine	ND	0.9
Hexachloroethane	ND	0.8
Nitrobenzene	ND	1.0
Isophorone	ND	0.9
bis(2-Chloroethoxy) methane	ND	1.0
1,2,4-Trichlorobenzene	ND	1.2
Naphthalene	ND	1.0
Hexachlorobutadiene	ND	0.6
Hexachlorocyclopentadiene	ND	0.4
2-Chloronaphthalene	ND	1.0
Dimethylphthalate	ND	0.5
Acenaphthylene	ND	0.7
2,6-Dinitrotoluene	ND	0.4
Acenaphthene	ND	0.6
2,4-Dinitrotoluene	ND	0.6
Diethylphthalate	ND	0.3
4-Chlorophenyl-phenylether	ND	0.6
Fluorene	ND	0.5
N-Nitrosodiphenylamine	ND	0.4
4-Bromophenyl-phenylether	ND	0.4
Hexachlorobenzene	ND	0.5
Phenanthrene	ND	0.3
Anthracene	ND	0.3
Di-n-butylphthalate	ND	0.3
Fluoranthene	ND	0.3
Pyrene	ND	0.2
Benzidine	ND	20
Butylbenzylphthalate	ND	0.6

ENVIROTECH RESEARCH, INC.

Client ID: SW-8-1
Site: L.E. Carpenter

Lab Sample No: 62992
Lab Job No: E185

Date Sampled: 05/29/98
Date Received: 05/29/98
Date Extracted: 06/05/98
Date Analyzed: 06/09/98
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t8659.d

Matrix: WATER
Level: LOW
Sample Volume: 960 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 625

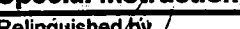

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Method Detection</u>
		<u>Limit</u> <u>Units: ug/l</u>
3,3'-Dichlorobenzidine	ND	1.7
Benzo(a)anthracene	ND	0.2
Chrysene	ND	0.3
bis(2-Ethylhexyl)phthalate	ND	1.1
Di-n-octylphthalate	ND	0.4
Benzo(b)fluoranthene	ND	0.1
Benzo(k)fluoranthene	ND	0.2
Benzo(a)pyrene	ND	0.1
Indeno(1,2,3-cd)pyrene	ND	0.1
Dibenz(a,h)anthracene	ND	0.2
Benzo(g,h,i)perylene	ND	0.1

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

PAGE 1 OF

Name (for report and invoice) Steve Carlson		Samplers Name (Printed) Dan LeLande		Site/Project Identification L.E. Carpenter / 3868.07	
Company RMT Inc.		P.O. # 3868.07		State (Location of site) NJ <input checked="" type="checkbox"/> NY: <input type="checkbox"/> Other:	
Address 999 Plaza Drive Ste 370		Analysis Turnaround Time Standard <input type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>		ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)	
City Schunmburg		State IL		Zip 60178	
Phone 847.995.1500		Fax 847.995.1400		Regulatory Program:	
Sample Identification		Date	Time	Matrix	No. of Cont.
SW-7-1	5-29-98	9:30	GW	4	0
SW-5-1	5-29-98	8:40	GW	4	0
SW-8-1	5-29-98	8:50	GW	6	0
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH		Soil:			
6 = Other _____, 7 = Other _____		Water:			

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1) 	RMT, Inc.	5-29-98, 9:30	1) K. CHALOKA	ENVIROTECH
2) K. CHALOKA	ENVIROTECH	5/29/98 10 ²⁹ AM	2) 	Company HOWARD SCHULZE ENVIROTECH RESEARCH, INC.
3)	Company	Date / Time 	Received by 3)	Company
4)	Company	Date / Time 	Received by 4)	Company

Laboratory Certifications: New Jersey (12543), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

Samples activated as per Steve Chilson 6/5 B